FMCSA-ELD-Malfunctions-Data-Diagnostics-FAQs(2022-03-10)-CORR1

**ELD Malfunctions and Data Diagnostic Events FAQs**

**Question:**Is an ELD required to monitor its compliance with the ELD technical requirements?  
 **Guidance:**Yes. An ELD must monitor its compliance with the ELD technical requirements and detect malfunctions and data inconsistencies related to power, data synchronization, missing data, timing, positioning, data recording, data transfer, and unidentified driver records requirements. The ELD output will identify these data diagnostic and malfunction events and their status as either “detected” or “cleared.” Typically, a driver can follow the ELD provider’s and the motor carrier’s recommendations to resolve the data inconsistencies that generate an ELD data diagnostic event, while a motor carrier must correct a malfunction.

**Question:**When do electronic logging device (ELD) “power data diagnostic events” and “power compliance malfunctions” occur?  
 **Guidance: “**Power data diagnostic events” occur when an ELD is not powered and fully functional within one minute of the vehicle’s engine receiving power and does not remain powered for as long as the vehicle’s engine stays powered.

“Power compliance malfunctions” occur when an ELD is not powered for an aggregated in-motion driving time of 30 minutes or more over a 24-hour period across all driver profiles.

**Question:**When do electronic logging device (ELD) “engine synchronization data diagnostic events” and “engine synchronization compliance malfunctions” occur?  
 **Guidance:** “Engine synchronization data diagnostic events” occur when an ELD loses ECM connectivity to any of the required data sources (engine power status, vehicle motion status, miles driven, and engine hours) and can no longer acquire updated values for the required ELD parameters within five seconds of the need.

“Engine synchronization compliance malfunctions” occur when ECM connectivity to any of the required data sources (engine power status, vehicle motion status, miles driven, and engine hours) is lost for more than 30 minutes during a 24-hour period aggregated across all driver profiles.

**Question:**When does an electronic logging device (ELD) “timing compliance malfunction” occur?  
 **Guidance:** A “timing compliance malfunction” occurs when the ELD can no longer meet the underlying compliance requirement to record Coordinated Universal Time (UTC), where ELD time must be synchronized with UTC, not to exceed an absolute deviation of 10 minutes at any time.

**Question:**When does an electronic logging device (ELD) “positioning compliance malfunction” occur?

**Guidance:** When an ELD fails to acquire a valid position measurement within 5 miles of the commercial motor vehicle moving and 60 minutes has passed, a “position compliance malfunction” will be recorded in the data diagnostic.

**Question:**When does an electronic logging device (ELD) “data recording compliance malfunction” occur?  
 **Guidance:** A “data recording compliance malfunction” occurs when an ELD can no longer record or retain required events or retrieve recorded logs that are not kept remotely by the motor carrier.

**Question:**When do electronic logging device (ELD) “data transfer data diagnostic events” and “data transfer compliance malfunctions” occur? **Guidance:** A “data transfer data diagnostic event” occurs when the operation of the data transfer mechanism(s) is not confirmed.

A “data transfer compliance” malfunction occurs when the ELD stays in the unconfirmed data transfer mode following the next three consecutive monitoring checks.

**Question:**When does an electronic logging device (ELD) “unidentified driving records data diagnostic event” occur? **Guidance:** An “unidentified driving records data diagnostic event” occurs when more than 30 minutes of driving time for an unidentified driver is recorded within a 24-hour period.

Question: What steps must the driver and carrier take if an ELD malfunctions?

Guidance:

1. The driver must inform their carrier of the malfunction within 24 hours.
2. The motor carrier has 8 days to repair, service, or replace the ELD. If the malfunction precludes the device from accurately recording hours of service (HOS) data and presenting that HOS data to a safety official, the driver must user paper logs or another system for recording their HOS during this time.
3. Under 49 CFR [395.34](https://www.ecfr.gov/current/title-49/subtitle-B/chapter-III/subchapter-B/part-395/subpart-B/section-395.34), a motor carrier seeking to extend the time permitted for repair, replacement, or service of one or more ELDs may request an extension within 5 days after the driver notifies the motor carrier of the malfunction. ELD malfunction extension requests [must be signed by the motor carrier and submitted to the [FMCSA Division Administrator for the State](https://www.fmcsa.dot.gov/mission/field-offices#Field-Offices)](https://www.fmcsa.dot.gov/mission/field-offices) of the motor carrier's principal place of business. For more information, see <https://eld.fmcsa.dot.gov/support>.

Question: What must a motor carrier do if there is an electronic logging device (ELD) malfunction?

**Guidance:** If an ELD malfunctions, a motor carrier must:

1. Correct, repair, replace, or service the malfunctioning ELD within 8 days of discovering the condition or a driver’s notification to the motor carrier, whichever occurs first; and
2. Ensure its driver complies with 49 CFR [395.34(a)(2) and (3)](https://www.ecfr.gov/current/title-49/part-395/section-395.34#p-395.34(a)) by requiring its driver to maintain paper record of duty status (RODS), if the malfunction hinders the accurate recording of the driver’s hours of service data, until the ELD is back in service.

Note: A motor carrier seeking to extend the time permitted for repair, replacement, or service of one or more ELDs shall notify the [FMCSA Division Administrator for the State](https://www.fmcsa.dot.gov/mission/field-offices#Field-Offices) of the motor carrier's principal place of business within 5 days after the driver notifies the motor carrier of the malfunction. Each request for an extension under 49 CFR [395.34(d)(2)](https://www.ecfr.gov/current/title-49/part-395/section-395.34#p-395.34(d)(2)) must be signed by the motor carrier and should include the legal name, principal place of business address and USDOT Number of the motor carrier. The extension request must contain the following information:

1. The name, address, and telephone number of the motor carrier representative who will file the request;
2. The make, model, and serial number of each ELD;
3. The date and location of each ELD malfunction as reported by the driver to the carrier; and
4. A concise statement describing actions taken by the motor carrier to make a good faith effort to repair, replace, or service the ELD units, including why the carrier needs additional time beyond the 8 days provided by 49 CFR [395.34(d)(1)](https://www.ecfr.gov/current/title-49/part-395/section-395.34#p-395.34(d)(1)).

Question: When does an electronic logging device (ELD) “missing required data elements data diagnostic event” occur?

**Guidance:** A “missing required data elements data diagnostic event” occurs when any required data field is missing at the time of recording.

**Question:** When should a driver certify his or her record of duty status (RODS) on the electronic logging device (ELD) to avoid malfunction codes?

**Guidance:** FMCSA recommends that drivers first certify their RODS before logging off the ELD and shutting down the commercial motor vehicle’s (CMV) engines. If drivers don’t follow this recommendation, malfunction codes may occur, such as indicating unaccounted odometer changes and suspicious driving activity.

Question: What types of visual indicators must be displayed by an ELD?

**Answer:** “Engine synchronization data diagnostic events” occur when an ELD loses electronic control module (ECM) connectivity to any of the required data sources (engine power status, vehicle motion status, miles driven, and engine hours) and can no longer acquire updated values for the required ELD parameters within five seconds of the need.

“Engine synchronization compliance malfunctions” occur when ECM connectivity to any of the required data sources (engine power status, vehicle motion status, miles driven, and engine hours) is lost for more than 30 minutes during a 24-hour period aggregated across all driver profiles.

Question: In the event of a malfunction that requires a driver to reconstruct his/her previous 7 days, can a driver use a printed copy of their previous 7 days, such as a PDF copy, instead of manually recording their previous 7 days?

**Guidance:** Yes. In the event that the driver experiences a malfunction that impairs the electronic logging device (ELD) ability to present the driver’s previous 7 days, the driver may present their previous 7 days by way of any printed copy, or in an electronic form, such as a PDF.

Question: If an electronic logging device (ELD) malfunction corrects itself after the driver has reconstructed his or her record of duty status (RODS), must the driver present their reconstructed RODS during an inspection?

**Guidance:** Yes, the reconstructed RODS, along with ELD data, must be presented to a safety official during a roadside inspection to satisfy the requirement to display the current day and the previous 77 days of duty status.

**Contact Info:** FMCSA ELD Information, 1-800-832-5660 or [ELD@dot.gov](mailto:ELD@dot.gov).

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*Note: This guidance document does not have the force and effect of law and is not meant to bind the public in any way.  It is intended only to provide information and clarity regarding existing requirements under the law or agency policies.*

**Regulatory Topic: ELD Guidance**

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